I. PRODUCT IDENTIFICATION

Simpson Strong-Tie Company, Inc. Company: 4120 Dublin Blvd, Suite 400 Address:

Dublin, CA 94568

Emergency Contact Number: 1-800-535-5053 USA

1-352-323-3500 International

Trade Name: AT- Acrylic Tie Adhesive Product Description: Acrylic based anchoring adhesive

Date Prepared or Revised: August 2003

II. HAZARDOUS INGREDIENTS

RESIN Names **CAS Numbers** Exposure Limits in Air ACGIH TLV **OSHA PEL**

Methyl Methacrylate 80-62-6 mag 05 100 ppm Silica amorphous (fumed) 67762-90-7 2 mg/m^{3*} 20 mg/m^{3**} 0.05 mg/m^{3***} 0.2 mg/m^{3****} Crystalline Silica 14808-60-7

*ACGIH TLV for amorphous silica, fume, respirable fraction. **OSHA PEL for amorphous silica, total fraction is 80 mg/m³

The remaining ingredients are designated as "trade secret".

INITIATOR

Chemical Names CAS Numbers Exposure Limits in Air ACGIH TLV OSHA PEL

Dibenzovl peroxide 94-36-0 5 mg/m³ 5 mg/m³ Diisobutyl phthalate 84-69-5 N/E N/E 2 mg/m^{3*}* 32 mg/m³** Silica, amorphous (fumed) 67762-90-7 0.05 mg/m^{3***} 0.2 mg/m^{3****} Crystalline Silica 14808-60-7

*** ACGIH TLV for crystalline silica, respirable fraction.

****OSHA PEL for crystalline silica, quartz, respirable is 10 mg/m³

%SiO₂ + 2

III. EMERGENCY OVERVIEW

RESIN

HMIS RATING: Health - 2; Flammability - 3; Reactivity - 0

Hazards - Non corrosive. Flammable. May cause skin allergic reaction.

INITIATOR

HMIS RATING: Health - 2; Flammability - 1; Reactivity - 0 Hazards - Non corrosive. May cause skin allergic reaction.

IV. PHYSICAL PROPERTIES

RESIN

Appearance: White paste **Physical Form:** Thixotropic gel

Viscosity: Paste Boiling Point, °F: N/E Odor: Strong acrid odor Vapor Pressure: N/F Freezing Point: N/E Vapor Density: N/E Specific Gravity: N/E Solubility In Water: N/E pH: 6.7

INITIATOR

Appearance: Black paste

Physical Form: Thixotropic gel Viscosity: Paste Boiling Point, °F: N/E Odor: No significant odor Vapor Pressure: N/F Freezing Point: N/E Vapor Density: N/E Specific Gravity: N/E

Solubility In Water: N/E **pH**: 5.8

V. FIRE AND EXPLOSION

RESIN

Flash Point: 73°F (23°C) Method Used: Closed cup

Flammable limits (LFL): N/E Upper (UFL): N/E Fire Extinguishing Media: Water fog, carbon dioxide, dry chemical,

aqueous foam.

Fire And Explosion Hazard: Hazardous gases/vapors produced are methyl methacrylate, carbon monoxide, carbon dioxide, and smoke. Toxic and flammable vapors may be produced under combustion. Fire Fighting Equipment: Wear full protective clothing and

self-contained breathing apparatus.

INITIATOR

Flash Point: 203°F (95°C) Method Used: Closed cup

Flammable limits (LFL): N/E Upper (UFL): N/E Fire Extinguishing Media: Water fog, carbon dioxide, dry chemical,

aqueous foam.

Fire And Explosion Hazard: Irritating and toxic fumes may produce carbon monoxide, carbon dioxide, byphenyl, and smoke. Toxic and flammable vapors may be produced under combustion. Fire Fighting Equipment: Wear full protective clothing and self-

contained breathing apparatus.

VI. REACTIVITY DATA

RESIN

Stability: Unstable with heat.

Condition To Avoid: Incompatible chemicals, heat and

open flames.

Incompatibility: Oxidizing agents and reducing agents.

Hazardous Decomposition Products: Decomposes with heat. Hazardous gases/vapors produced are carbon monoxide, carbon dioxide

Hazardous Polymerization: Polymerization can occur when exposed to

excessive heat.

INITIATOR

Stability: According to the manufacturer, this material is stable at temperature up to 113°F (45°C).

Condition To Avoid: Incompatible chemicals and temperature above 113°F (45°C).

Incompatibility: Strong oxidizing agents, acids, and bases.

Metal salt, reducing agents, and accelerators.

Hazardous Decomposition Products: Combustion may produce carbon monoxide, carbon dioxide, byphenyl, and smoke. Other toxic and flammable vapors may be produced.

Hazardous Polymerization: Will not occur under normal

temperature and pressure.

VII. HEALTH HAZARD INFORMATION **ACUTE**

RESIN

Eye: May cause eye irritation, swelling, tearing, redness or cornea damage.

Skin: Moderate irritation. May cause skin sensitization,

evidenced by rashes and hives.

Inhalation: Moderate irritation to the nose and respiratory tract. May cause CNS depression, evidenced by giddiness, headache, dizziness, and nausea.

Ingestion: May cause irritation to the gastrointestinal tract.

Systematic Effects: Lungs, eyes, and skin.

INITIATOR

Eye: May cause eye irritation, swelling, tearing, redness or cornea damage.

Skin: Moderate irritation. May cause skin sensitization,

evidenced by rashes and hives.

Inhalation: Moderate irritation to the nose and respiratory tract. Ingestion: May cause irritation to the gastrointestinal tract

Systematic Effects: Lungs, eyes, and skin.

VII. <u>HEALTH HAZARD INFORMATION (CONTINUED)</u> CHRONIC

RESIN

Prolonged and/or repeated exposure to methyl methacrylate may lead to kidney, lung, liver and heart damage. Respirable crystalline silica (quartz) can cause silicosis (scarring) of the lungs. Exposure to silica dust is not likely from normal use of this product.

INITIATOR

Systemic toxicity in humans has not been reported. Respirable crystalline silica (quartz) can cause silicosis (scarring) of the lungs. Exposure to silica dust is not likely from normal use of product. Quartz silica and carbon black, a trace ingredient, are potential carcinogens as indicated below

SUSPECTED CANCER AGENT

RESIN

INITIATOR

Some chemicals in the initiator are found in the following lists:

Some chemicals in the resin are found in the following lists: Federal OSHA, NTP, IARC(silica, quartz)

nia to cause cancer and/or reproductive toxicity and subject to warning and

These products contain the following chemicals known to the State of California to cause cancer and/or reproductive toxicity and subject to warning and discharge requirements under the California "Safe Drinking Water and Toxic Enforcement Act of 1986" (as specified in 22 CCR Section 12000):

RESIN

SIIV

Cilios quart-

<u>CAS #</u> 4909 60 7 % in blend (approx.)

Silica (quartz)

<u>CAS #</u> 14808-60-7

% in blend (approx.)

Silica, quartz Carbon Black 14808-60-7 1333-86-4

Federal OSHA, NTP, IARC(silica, quartz)

0.07

VIII. TOXICOLOGICAL PROPERTIES

RESIN

Acute Oral (LD₅₀, Rat) – Non toxic Acute Dermal (LD₅₀, Rabbit) – N/E Acute Inhalation (LC₅₀, Rat) - N/E **INITIATOR**

INITIATOR

Acute Oral (LD₅₀, RAT) - N/E Acute Dermal (LD₅₀, Rabbit) - N/E Acute Inhalation (LC₅₀, Rat) - N/E

IX. FIRST AID

RESIN AND INITIATOR

Eye Contact: Immediately flush eyes with plenty of cool water for at least 15 minutes while holding the eyes open. CONSULT A PHYSICIAN. **Skin Contact:** Remove product and immediately wash affected area with soap and water. Do not apply greases or ointments. Remove contaminated clothing. Wash clothing with soap and water before reuse. CONSULT A PHYSICIAN

Ingestion: If conscious, immediately give two large glasses of water. Do not induce vomiting. Never administer anything by mouth to an unconscious victim. CONSULT A PHYSICIAN.

Inhalation: Remove to fresh air if symptoms listed in Section VII occur. CONSULT A PHYSICIAN.

X. ENVIRONMENTAL AND DISPOSAL INFORMATION

RESIN AND INTIATOR

Action To Take For Spills/Leaks: Keep out of sewers, storm drains, surface waters, and soils. Small spills: Soak up with suitable non-reactive absorbent material, neutralize residue if necessary with potassium permanganate, scoop into containers for disposal.

Large spills: Dike and pump into suitable containers for disposal, clean-up residue with absorbent material.

Disposal Information: Place in leak-proof, compatible containers. Dispose of in accordance with federal, state, and local regulations.

XI. STORAGE AND HANDLING

RESIN AND INITIATOR

Storage: Keep away from: acids, oxidizers, heat, or flames. Keep in cool, dry, well-ventilated area in closed containers. Protect containers from physical damage.

Handling: To prevent skin and eyes contact under the foreseeable conditions of use, wear appropriate protective clothing and safety eyewear. When handling, do not eat, drink, or smoke. Wash thoroughly after handling. Avoid breathing fumes. Handle in a well ventilated work area.

XII. TRANSPORTATION

IATA Classification:

RESIN AND INITIATOR

US DOT Classification: Adhesives (Containing Flammable Liquid), 3, UN1133, PG III.

Organic Peroxide, Type E, Liquid (Dibenzoyl Peroxide, 26%), 5.2, UN3107, PG II. Adhesives (Containing Flammable Liquid), 3, UN1133, PG III, Packing Instruction 309.

Organic Peroxide, Type E, Liquid (Dibenzoyl Peroxide, 26%), 5.2, UN3107, PG II, Packing Instruction 500.

XIII. OTHER INFORMATION

CNS - Central Nervous System

N/E - Not Established

This Material Safety Data Sheet (MSDS) is prepared by Simpson Strong-Tie Co. in compliance with the requirements of OSHA 29 CFR Part 1910.1200. The information it contains is offered in good faith as accurate as of the date of this MSDS. No guarantee, expressed or implied, is hereby made. Health and Safety precautions may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations.

